

RAW SEQUENCE LISTING

DATE: 12/03/2001

PATENT APPLICATION: US/09/924,035A

TIME: 12:48:01

Input Set : N:\EBONY'S\924035.txt

Output Set: N:\CRF3\11212001\I924035A.raw

ENTERED

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4 <110> APPLICANT: Grlach, Jrn
6 <120> TITLE OF INVENTION: Expressed Sequences of Arabidopsis
7   thaliana
9 <130> FILE REFERENCE: 2011US
W--> 11 <140> CURRENT APPLICATION NUMBER: US/09/924,035A
11 <141> CURRENT FILING DATE: 2000-08-11
13 <150> PRIOR APPLICATION NUMBER: US 60/148,784
14 <151> PRIOR FILING DATE: 1999-08-13
16 <160> NUMBER OF SEQ ID NOS: 900
18 <170> SOFTWARE: FastSEQ for Windows Version 3.0
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21 <211> LENGTH: 427
22 <212> TYPE: DNA
23 <213> ORGANISM: Arabidopsis thaliana
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26 <221> NAME/KEY: misc_feature
27 <222> LOCATION: (1)...(427)
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32   tggtcaccaa gaagcgggtga caccaataac caacccgata gttggcctct tgaagatggt      120
33   cctcattctg atttcacggg acctacctcg ggggtgcacag cgtgtgtagc tcttattaaa      180
34   gataagaagc tctttgttgc aaatgccggt gactcacgtt gtgtgatatc aagaaagagt      240
35   caggcttaca atctttctaa agatcacaag cctgatcttg aagttgaaaa agaaaggata      300
W--> 36   ttgnangctg gtggctttat tcacgctggg agaatcaatg gaagcttgaa tctgacaaga      360
37   gccattggtg atatggagtt caagcagaat aagtttttac catctgaaaa gcaaattggt      420
38   actgctg                                     427
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47   tttcggtttg gaaacgtctg aggagttcaa tagcgatatt tctgaactcg ttttctcgtc      120
48   ctttcatgct cacaatcacc ttaaccttgt caccatcttg caagaacttt tgggcagccc      180
49   ttagacgaac ggaataatca tgctga                                     206
51 <210> SEQ ID NO: 3
52 <211> LENGTH: 369
53 <212> TYPE: DNA
54 <213> ORGANISM: Arabidopsis thaliana
56 <220> FEATURE:
57 <221> NAME/KEY: misc_feature
58 <222> LOCATION: (1)...(369)
59 <223> OTHER INFORMATION: n = A,T,C or G
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63   cccacgttaa ttctctcttc tttgttttgt ttcagattca ttacttttct ccaaaaaact      120

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64 ttcttcaaga tctgttcttt taaataatta tggcggaaga acatcgatgc gagacgctg 180
65 aaggtcaccg tctctgcgtt aacaactgcg gtttcttcgg aagctcagcg acaatgaatc 240
W--> 66 tatgttcaaa ctgttacggc gatctctgtc tcnaacaaca acaacaagct tccatgaaat 300
67 caaccgtcga atcatctctc tctccggtga tcgcacctgt tctcgaaaac tacgcggcgg 360
68 agttagaga 369
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71 <211> LENGTH: 430
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77 ctctgttgtt cttcttcaact gctctagctc tcgccttcgc catttaccac gtcactcag 120
78 gctggtttgc ctgcgcgttc gatgatgta accgacatca gagagctaga tccttggtc 180
79 aagaggagga gccaccgatt cctcagcctg ttcaagtgg tgagatcacg gaggaggagc 240
80 ttaaacagta cgatggctct gatcctcaaa agccccttct tatggctatc aaacatcaga 300
81 tctatgatgt tacacaaagc aggatgttct acggaccagg aggaccatat gctttgtttg 360
82 cagggaaaga cgctagccga gctcttgcaa agatgtcatt tgaggagaaa gacttgactt 420
83 gggatgtctc 430
85 <210> SEQ ID NO: 5
86 <211> LENGTH: 106
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88 <213> ORGANISM: Arabidopsis thaliana
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92 atagtcaaag ttcgtagtaa gtagacttag aaatagttac cgttag 106
94 <210> SEQ ID NO: 6
95 <211> LENGTH: 271
96 <212> TYPE: DNA
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101 atagtgaaga cgcccaatgc agtaaattccg ctcgtaggg attattctcc acttctcacc 120
102 attgatacct gggagcacgc ttactatctg gattttgaga accgaagagc tgaatacata 180
103 aatacattca tggaaaagct tgtgtcatgg gaaactgtaa gcacaagggt ggaatccgca 240
104 attgctcgag cagtgcgaag agaacaagaa g
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107 <211> LENGTH: 322
108 <212> TYPE: DNA
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112 <221> NAME/KEY: misc_feature
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114 <223> OTHER INFORMATION: n = A,T,C or G
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118 aagaacagag acaattcaac acatgtaaat gcataaaatc aaacaaactg aaacacaaag 120
W--> 119 acacttcaaa cgaaagaact gagattgaag gaaccaatca tgtttgngng agcagaactc 180
W--> 120 atatctagct caagctgaag cttctgnggc tcaagctggt gcctcaaac tggatcttcc 240
121 acttgctctg ttattgcagc taattgttcc gtctgctcag tctccaaacc ctgaacagga 300
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125 <211> LENGTH: 497
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127 <213> ORGANISM: Arabidopsis thaliana
129 <400> SEQUENCE: 8
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131 aaacatttga gaattcacta cttagacatt gtctcttgtt actaccgagt taaaaagatt 120
132 tacattactc tcctcactcc atcaacttct ttgaattgtt ccatctctaa ccaccatacg 180
133 gtaagccgag cctaagggaa gtgtcggagc tctcggagtc aacaggcgct ccggtagagt 240
134 ttccggcggt agtaatagac tccgacgact gtcttctctc gtacacagca gcgttctccg 300
135 attcagcacc accgtgtgca tgcacattgt tacatatattg catgccaaagt cgctcgttct 360
136 cttccggttag ttgcgttccc tgcaaaaatc aagacaaaac atatcattaa gttctctagc 420
137 taagtatttg cattttgtgt ttttagtggc accatgtgtt ttgaatttct ctagagatca 480
138 actaactacg aatgagc 497
140 <210> SEQ ID NO: 9
141 <211> LENGTH: 347
142 <212> TYPE: DNA
143 <213> ORGANISM: Arabidopsis thaliana
145 <400> SEQUENCE: 9
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147 tggcaaagta acttaaacaa aaacaaaaac acgggtaagg gtctaaggga aactacttaa 120
148 accagtaaga aaaccgatca ctatcttcat ttcatttgaa tcaacataag atctcaagat 180
149 gcgtttgtat ttgcccgggt taccagacca ggtagacttg ttgatgatcg cttaatcttt 240
150 agccagtact cgttatatac ttttttctct gacatcttct cgaagaatct actccaacct 300
151 tccataactc gggtcagcct aacactcttg ggtcttctta taaggta 347
153 <210> SEQ ID NO: 10
154 <211> LENGTH: 216
155 <212> TYPE: DNA
156 <213> ORGANISM: Arabidopsis thaliana
158 <400> SEQUENCE: 10
159 tttttttttt tttttccaga aaaaaggaca agccaataaa acatagattg tctacacaca 60
160 cacttctctt aaaaatacaa actttgagga aacgagagaa actttgaaag ccatacatat 120
161 aatacaagag tgttttgatg gagggagggtc ttaaaagtcg agattggagg aaggattcgg 180
162 gtatccttta tactcaaatt gtttcttgga aaagcc 216
164 <210> SEQ ID NO: 11
165 <211> LENGTH: 329
166 <212> TYPE: DNA
167 <213> ORGANISM: Arabidopsis thaliana
169 <400> SEQUENCE: 11
170 tttttttttt tttttttttt tttttttttg gaggagaaga gctgaatttt tctaattaat 60
171 aaataaaatt tggagcccat aatttacatt gctatatctc totatagctc ctggcttcga 120
172 agtaatttta tcatcgcca cacaacaaaa acctatttcg agtatacaaa ctactaatta 180
173 aatcggaacc actgtgcca cttttctttt ctatcagaga aactaaatca gccagtgcct 240
174 cgctttgcaa attacatcct gcagtgtagc agacaaggcc aagattctga accgatattg 300
175 aagagagagt caacaacatc atacaagtg 329
177 <210> SEQ ID NO: 12
178 <211> LENGTH: 145
179 <212> TYPE: DNA

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180 <213> ORGANISM: Arabidopsis thaliana
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183 ttttttttaaa caaacagtct acacatagac aactcaaagc caacaaatga aacaaaatat 60
184 aaaacatatg caaagataaa atattttaaaa aaaggtaaca cgttgattat acatgagtat 120
185 acgtatatct atatatatac gtatt 145
187 <210> SEQ ID NO: 13
188 <211> LENGTH: 318
189 <212> TYPE: DNA
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192 <400> SEQUENCE: 13
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194 aatagagaca tgtttgatc acaaaattaa cttatgtagg aaaaacaaat agtataagtc 120
195 tatcgttccc ctctctgttc aggcgtcaaag cctcccttgc cacatttagg acaactcttc 180
196 ataccaaadc cttgacaatc aaaacatttc cacctctcaa acatatttcc gttcttctta 240
197 tttttacctg ttcccttgca accgggacat tcaattgctc ctttggtctc acaagtctca 300
198 caacttttga atatcgaa 318
200 <210> SEQ ID NO: 14
201 <211> LENGTH: 278
202 <212> TYPE: DNA
203 <213> ORGANISM: Arabidopsis thaliana
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208 gtttagcact tttgcatcac ccaagttctt tatttcaaag tttctcctt tttctcttat 180
209 cagtctgaga agtcatttaa aaaggaagag tttttaattg atggggtcct ttccgatggc 240
210 tttctggaca agcccggctt gctctttgac atggaaaag 278
212 <210> SEQ ID NO: 15
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214 <212> TYPE: DNA
215 <213> ORGANISM: Arabidopsis thaliana
217 <400> SEQUENCE: 15
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219 cctaagataa gccataaaaa aacatctcga aatatgacat caaaaatata acatttaatt 120
220 ccaaatatca gttctacaat atgggcaata aacattgggtg tctagccaag gcaataagca 180
221 tatggagtga aacttatggg cacatggtag gtgtaccaag gtctcacctt tcttgaaccg 240
222 gtctagacat atagcacaat cttgttggtc cctaac 276
224 <210> SEQ ID NO: 16
225 <211> LENGTH: 566
226 <212> TYPE: DNA
227 <213> ORGANISM: Arabidopsis thaliana
229 <220> FEATURE:
230 <221> NAME/KEY: misc_feature
231 <222> LOCATION: (1)...(566)
232 <223> OTHER INFORMATION: n = A,T,C or G
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236 tattcgaaatc ttgatttttt tggtccaagt ataataaagg taacgtcaca tcagaaatct 120
237 atttatttcc caaacactaa ttgcacaaaa agcaaagtaa aaccactgtg atacaaattc 180
238 tataaagata aaaaaagttt atgctcaatt aaataacgta aagaaaacta tattgacaaa 240

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239 taaagacaac aacgacggaa ataaacaact aaaaaccact ttcttttgatt tcacacaatt 300
240 ttagtgagtc aaaacgctgt gctgaagtag ctactcacca cattctcaca cagaatttgg 360
241 agaaccttag cattacttgg cttcacacat cttggcatct taaactgtcc agccgatgaa 420
242 ccaagcccgga gaaaatgttc ttgaatcttc cggaaagtgc cttttgagac aactctcagc 480
W--> 243 tccaaggctc caatagtctt gcatttccgg nnnctaactg aacccgcacg gatgaatgct 540
244 cggctctaac agttgcagca atcttg 566
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247 <211> LENGTH: 328
248 <212> TYPE: DNA
249 <213> ORGANISM: Arabidopsis thaliana
251 <400> SEQUENCE: 17
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253 ggtaatttgt ttaaataaac cgttcaacg atccattaca cctcttaaac ccttctttac 120
254 tactacactc cataagatca tcattaatac gataatcact atgattatct acgtaatcat 180
255 gattaccacg ttgatgttga tgatgatgat gatgacgatt cctcccgcg cccgccgctt 240
256 ctaacgcac cacttgtgct ccaacctcgc cgctttttct ccttatatac gccgccgaca 300
257 tatctccacc accgttcact cctcctcc 328
259 <210> SEQ ID NO: 18
260 <211> LENGTH: 315
261 <212> TYPE: DNA
262 <213> ORGANISM: Arabidopsis thaliana
264 <220> FEATURE:
265 <221> NAME/KEY: misc_feature
266 <222> LOCATION: (1)...(315)
267 <223> OTHER INFORMATION: n = A,T,C or G
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271 tataccaacg tctccattta gtcgaaaacg cagcgtctca tagaagttga ctaatgctgc 120
272 ttttgcagca gaataaagac tcatccgtgg tagaggcaac cagttttcaa ccgatgcatt 180
273 cagcactatt cggccattcg tctggtgaag gtatggcaac gctacgtatg tcggataaac 240
274 attccccag aagtttatgt ccagcaaagtg tggaaacaca gtcgtgtcac tcacttctc 300
275 aaagtaaaaa gtgtg 315
277 <210> SEQ ID NO: 19
278 <211> LENGTH: 292
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280 <213> ORGANISM: Arabidopsis thaliana
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284 aagaaaaaga acaatggaaa ttttggggct aagtactctt tgtttttggt ttctcagaac 120
285 agatgaaaca atcttaaagg gttgtttcgt tcatcttcta gacttctttt ttgaggcctt 180
286 agaggaaggc gcaggtgcat tccctttaga actggccact tggtttgact ttgaagttga 240
287 aggagctgct tcttgtttat ccttggtcac cgcacctgc gagccacgga tt 292
289 <210> SEQ ID NO: 20
290 <211> LENGTH: 137
291 <212> TYPE: DNA
292 <213> ORGANISM: Arabidopsis thaliana
294 <400> SEQUENCE: 20
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296 acatctacaa agatttcact acatctgaa accaaacct tcgtcctaatt ttcacaaacc 120

Use of n and / or Xaa has been detected in the
Sequence Listing. Review the Sequence Listing
to ensure a corresponding explanation is present
in the <220> to <223> fields of each sequence
using n or Xaa.

VERIFICATION SUMMARY

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L:11 M:282 W: Numeric Field Identifier Missing, <140> CURRENT APPLICATION NUMBER: is Added.
L:36 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:66 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:119 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:120 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:243 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:270 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:394 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:411 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:462 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31
L:606 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41
L:633 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43
L:634 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43
L:745 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50
L:775 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52
L:776 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52
L:791 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53
L:830 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55
L:871 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58
L:872 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58
L:966 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65
L:1009 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68
L:1034 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70
L:1192 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82
L:1258 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:88
L:1398 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:98
L:1434 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101
L:1452 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:102
L:1476 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:103
L:1494 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:104
L:1560 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:108
L:1561 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:108
L:1620 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:112
L:1660 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:115
L:1677 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:116
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L:1714 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:118
L:1732 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:119
L:1739 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:119
L:1765 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:121
L:1767 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:121
L:1784 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:1785 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:1787 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:1844 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:127
L:1879 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:129
L:1925 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:132
L:1994 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:137

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L:2191 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:152